

Ecomagination at GE

Mercury Solutions

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imagination at work



Ecomagination at GE

The world's most pressing challenges present an opportunity to do what we do best ... **imagine, solve and build** innovative solutions that benefit both customers and society



GE Environmental Strategy

Mercury – A tough emission challenge

Current Coal Plants

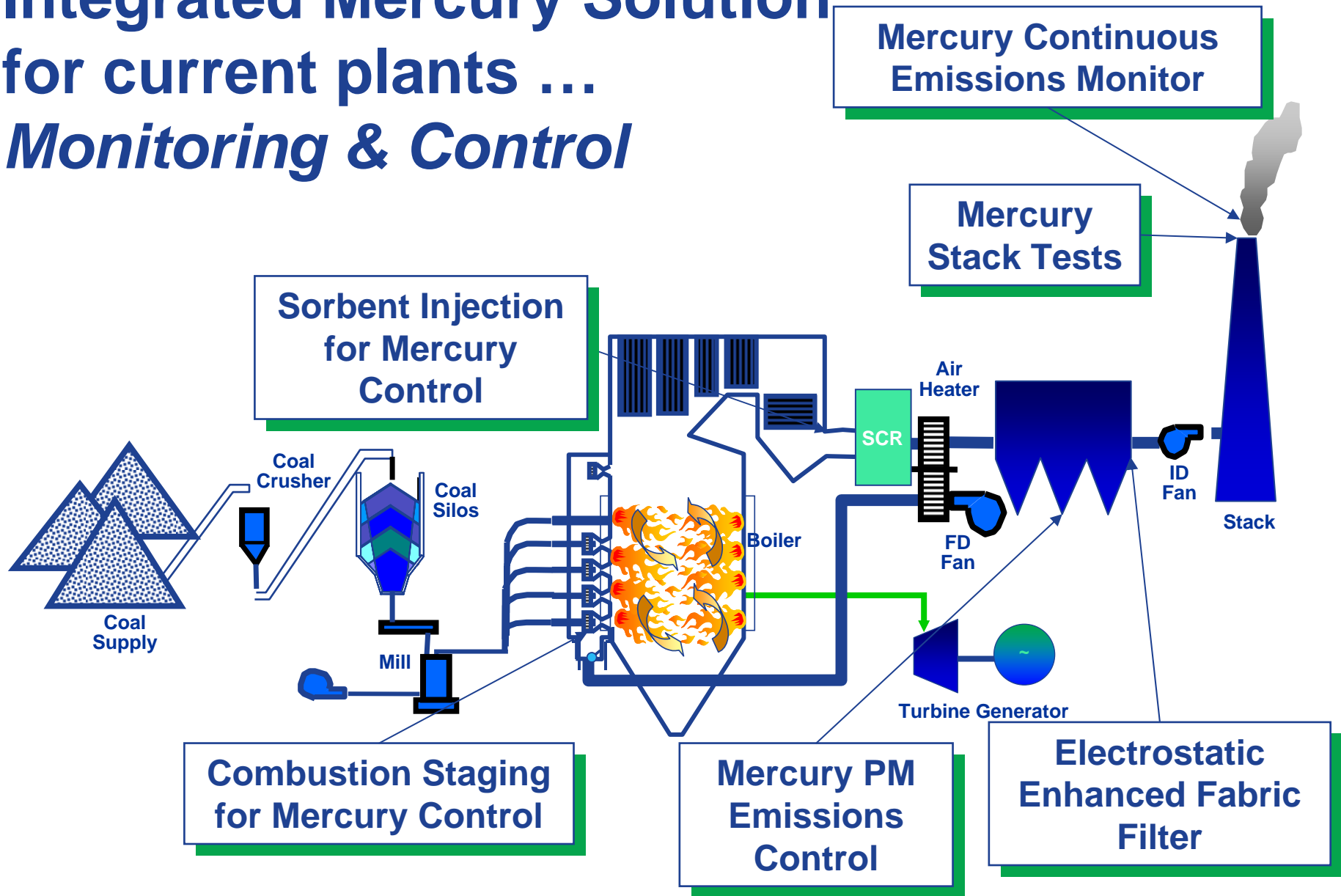
Reduction opportunity of 90% through Integrated Solutions

- Combustion Staging for mercury and NO_x control
- Sorbent injection including activated carbon
- ESP upgrade for particulate matter (PM) and mercury control
- Fabric filter retrofit for PM and mercury control
- Mercury monitoring

Future Coal Plants

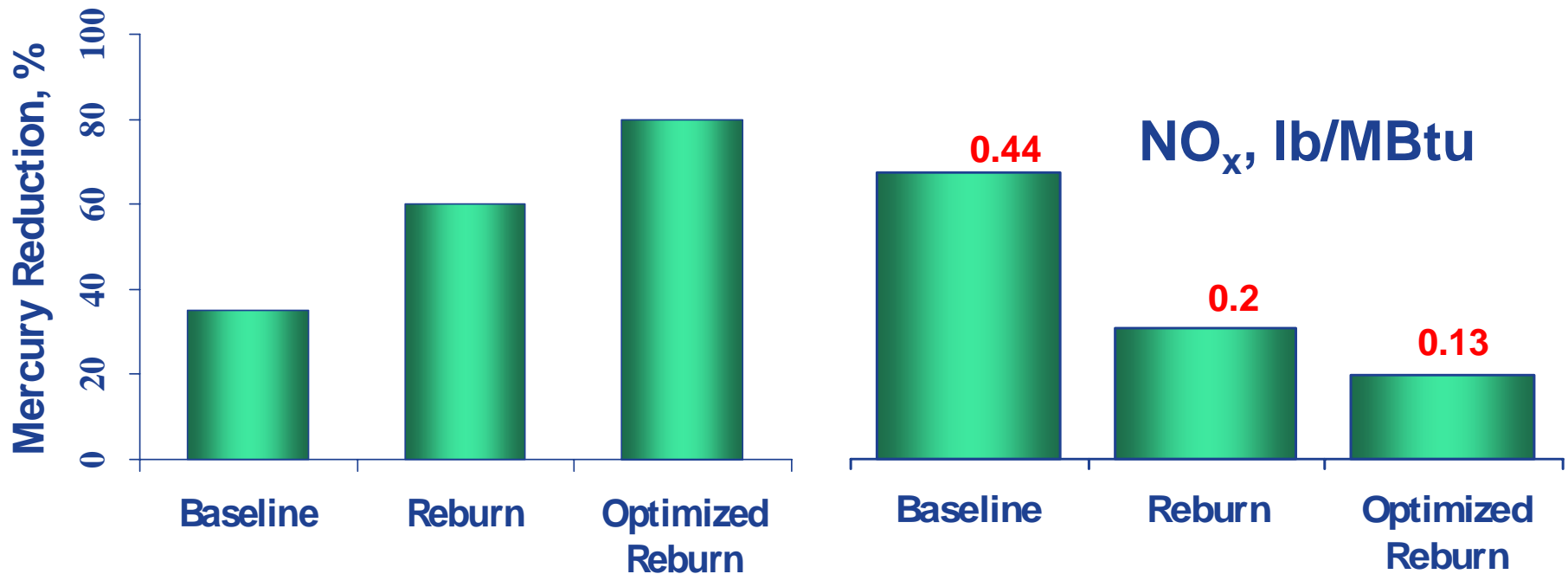
Integrated Gasified Combined Cycle (IGCC) Solutions have 90% + reductions

Integrated Mercury Solution for current plants ... *Monitoring & Control*



Field Trials at Green Station

- DOE and GE sponsored
- 250 MW wall-fired unit with coal reburn
- Eastern US Bituminous coal
- Cold side Electrostatic precipitator (ESP)



IGCC vs. Pulverized Coal

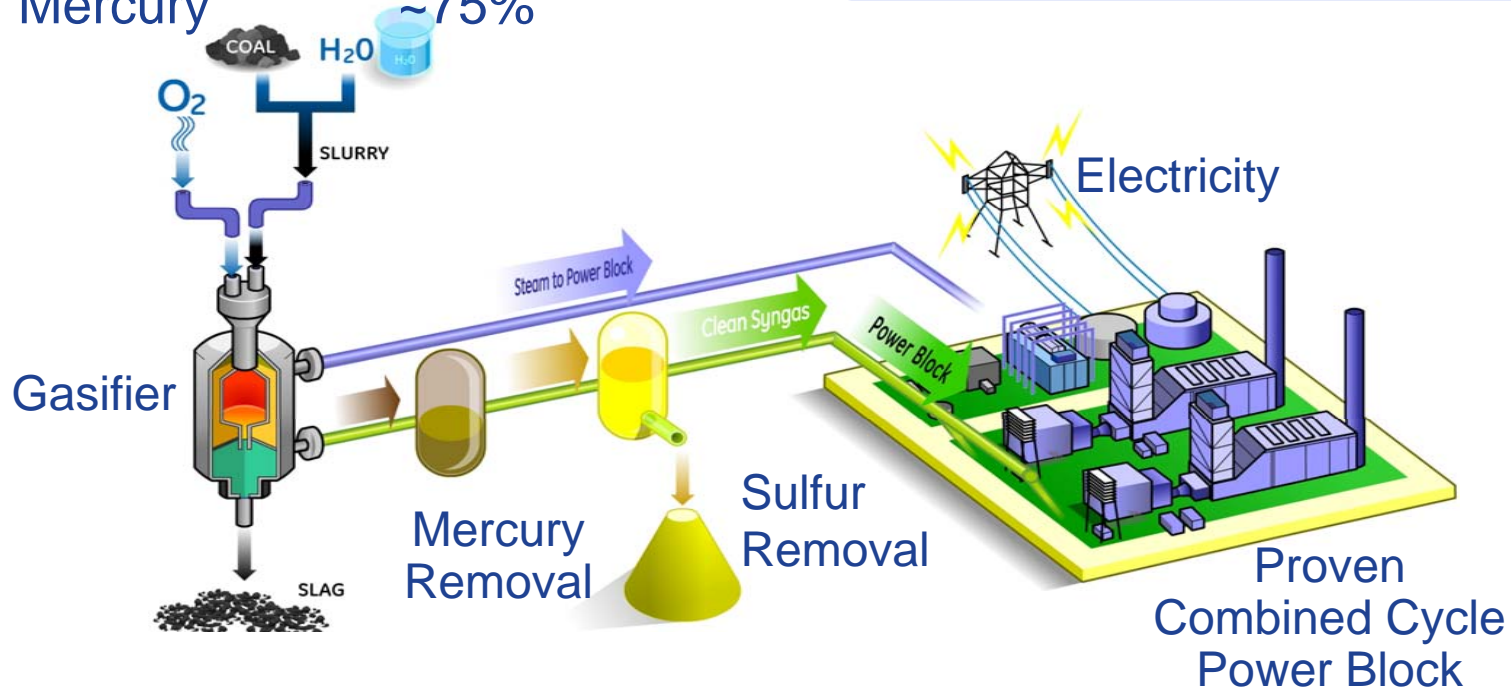
Superior environmental performance meets regulatory and market demands

Environmental Impact Lower for IGCC vs PC

NO_x ~33%
SO_x ~75%
Particulates ~50%
Mercury ~75%

Status Update

- Ref Plant Design – In development
- AEP – Scoping study complete
- Cinergy – Scoping study complete
- Next Step - Front end engineering





Thank You

**Additional Mercury Information
on Existing & New Power
plants available**

**STOP BY GE BOOTH FOR INFO
PACKETS**